



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Case No. 00-1123-H)

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| In application of: |) | |
| |) | |
| Cunningham et al. |) | |
| |) | Examiner: S. Latimer |
| Serial No. 10/058,626 |) | |
| |) | Group Art Unit: 1645 |
| Filed: January 28, 2002 |) | |
| |) | Conf. No. 4870 |
| For: Optical Detection of Label-Free |) | |
| Biomolecular Interactions Using |) | |
| Microreplicated Plastic Sensor Elements |) | |

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

FIRST
FOURTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Dear Sir:

Pursuant to the duty of disclosure provided by 35 C.F.R. § 1.56 and §§ 1.97-98, the applicants wish to make the following references of record in the above-identified application. Copies of the references are enclosed. Copies are also listed in the PTO-1449 form enclosed herewith. It is requested that the documents be given careful consideration and that they be cited of record in the prosecution history of the present application so that they will appear on the face of the patent issuing from the present application.

In the judgment of the undersigned, portions of the references may be material to the examination of the pending claims, however no such admission is intended. 37 C.F.R. 1.97 (h). The references have not been reviewed in sufficient detail to make any other representation and, in particular, no representation is indented as to the relative importance of any portion of the references. This Statement is not a representation that the cited references have effective dates early enough to be "prior art" within the meaning of 35 U.S.C. sections 102 or 103.

CITED REFERENCES

US Patent Documents

1. U.S. Patent No. 5,492,840; Malmqvist et al.; issued February 20, 1996.

US Publications

2. Cunningham et al., U.S. Publication No. 20030027328, published 6 February 2003.
3. Cunningham et al., U.S. Publication No. 20020127565; published 12 September 2002.
4. Cunningham et al., U.S. Publication No. 20030027327, published 6 February 2003.

Foreign Documents

5. PCT Patent Publication No. WO 02/061429, published 8 August 2002.

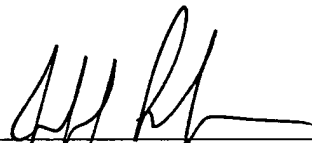
Other Documents

6. Cunningham et al., *Sensors and Actuators B* 85; pp 219-226 (2002).
7. Cunningham et al., *Sensors and Actuators B* 81; pp 316-328 (2002).
8. Pandey, A. and Mann, M., *Nature*. 405(6788):837-46 (2000).
9. Patterson, S.D., *Current Opinions in Biotechnology*, 11(4):413-8 (2000).
10. International Search Report for foreign counterpart application PCT/US03/01175.

Respectfully submitted,

Date: October 10, 2003

By:



Jeffrey D. Anderson, Ph.D.
Reg. No. 51,403

FORM PTO-1449
(R v. 2-32)U.S. Department of Commerce
Patent and Trademark Office

Atty. Docket No.

01-1123-H

Serial No.

10/058626

**FOURTH SUPPLEMENTAL INFORMATION
DISCLOSURE STATEMENT BY APPLICANT**

(Use several sheets if necessary)



Applicant:

Cunningham et al.

Filing Date:

January 28, 2002

Group:

1645

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U.S. PATENT DOCUMENTS

| Examiner Initial | | Document Number | Date | Name | Class | Subclass | Filing Date if Appropriate |
|------------------|----|-----------------|----------|------------------|-------|----------|----------------------------|
| | 1. | 5,492,840 | 02/20/96 | Malmqvist et al. | | | |

U.S. PATENT APPLICATION DOCUMENTS

| Examiner Initial | | Document Number | Publication Date if Appropriate | Name | Class | Subclass | Filing Date |
|------------------|----|-----------------|---------------------------------|-------------------|-------|----------|-------------|
| | 2. | 20030027328-A1 | 6 Feb 2003 | Cunningham et al. | | | |
| | 3. | 20020127565-A1 | 12 Sept 2002 | Cunningham et al. | | | |
| | 4. | 20030027327-A1 | 6 Feb 2003 | Cunningham et al. | | | |

FOREIGN PATENT DOCUMENTS

| Examiner Initial | | Document Number | Date | Country | Class | Subclass | Translation Yes | Translation No |
|------------------|----|-----------------|------------|---------|-------|----------|-----------------|----------------|
| | 5. | WO 02/061429 | 8 Aug 2002 | PCT | | | | |

OTHER DOCUMENTS

(Including Author, Title, Date, Pertinent Pages, Etc).

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|----------|-----|---|
| | 6. | Cunningham et al., <i>Sensors and Actuators B</i> 85; pp 219-226 (2002). |
| | 7. | Cunningham et al., <i>Sensors and Actuators B</i> 81; pp 316-328 (2002). |
| | 8. | Pandey, A. and Mann, M., <i>Nature</i> . 405(6788):837-46 (2000). |
| | 9. | Patterson, S.D., <i>Current Opinions in Biotechnology</i> , 11(4):413-8 (2000). |
| | 10. | International Search Report for foreign counterpart application PCT/US03/01175. |
| EXAMINER | | DATE CONSIDERED |

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication.